

Chapter 6

Educating for Behavior Change

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Introduction

Lead poisoning is mostly an invisible disease--children who are diagnosed with it usually show no symptoms but it is the number one environmental health threat to children. Lead hazards are found in everyday things, such as the paint and dust in our homes, the toys our children play with, the pottery off which we eat, the candles we burn. And yet the long-term effects of lead poisoning on a child, family, and a community are profound. Education about the possible sources of lead exposure, the risks of lead poisoning, and actions key parties can take to prevent or decrease exposure to lead hazards is important in our effort to protect our children and eliminate lead poisoning.

The local health department plays an important role in providing the community with the information needed to implement and enforce actions that will lead to the elimination of childhood lead poisoning.

Figure 6.1 is a list of some of the important topics to cover when presenting information on childhood lead poisoning and prevention. The extent to which each topic is covered, how the information is presented, and evaluating how well it is understood will vary from audience to audience.

No matter what information is being presented, the learning needs and style of the audience is of primary consideration. This includes not only the language (what is spoken and the level of use) used to present it, but also the interests and focus of the audience, the timing of the presentation, and any cultural barriers that may effect how the information is received.

This chapter provides a brief background on the elements of educating for behavior change and strategies for presenting information to multiple audiences involved in the prevention, diagnosis, and treatment of childhood lead poisoning.

Figure 6.1

Information About Childhood Lead Poisoning

Sources and pathways of lead (Chapter 4)

Adverse health/developmental effects that can result from lead exposure and the importance of preventing or quickly decreasing exposure if it occurs (Chapter 4, 9).

The relationship between child development, lead hazards, environmental conditions, supervision, and family living patterns that can affect lead exposure (Chapter 8).

The role of nutrition and lead poisoning (Chapter 11).

The medical and environmental management of lead poisoning, including chelation therapy if appropriate (9, 10).

Timetable for re-testing lead level (Chapter 7, 10).

Resources available in the community to meet the child/family needs regarding follow-up tests, health care, nutrition, and difficulties in learning or behavior.

The role and responsibility of property owner and tenant as it relates to lead hazard reduction.

Temporary measures to reduce risk and create a safer environment. (Chapter 8, 9).

Resources available in the community to meet family needs regarding lead hazard reduction, such as community weatherization or CAP agencies

The role of public health in environmental investigation for lead hazards and enforcement (Chapter 9).

The necessity for the child who is being chelated to be in a lead-safe environment during treatment (Chapter 8, 10).

The need for long-term evaluation to monitor and identify effects of lead toxicity, such as difficulties in learning, growth, development. (Chapter 10, 12).

Facilitate and encourage the use of regular, consistent, and affordable health care (Chapter 10)..

Facilitate active decision-making, self-responsibility and self-care practices by the family (Chapter 10).

Elements of Educating for Behavior Change

Before discussing customizing the right message for the right audience, it's important to step back and review the key elements of educating for behavior change. The steps that will allow you to most effectively use your time are as follows:

- ◆ Identify the Problem or Issue
- ◆ Identify the Target Audience
- ◆ Identify the Principle Message to Convey

Identify the Problem or Issue

The first step is to identify the problem you want to address. This may seem a rather obvious step in the process but there are subtleties that can make a significant difference. Let's say, for example, that you want to increase blood lead screening in your community. Limited resources (i.e., time, money and opportunity) often dictate that you can't simply have everyone get a blood lead test.

So be more specific and begin by asking yourself these questions:

- What do you want to accomplish in your communication—what's your objective?
- What is the ideal behavior or environmental practice that you want as a result of your efforts? An ideal behavior or environmental practice is one that can be described as a single, observable action to reach your objective.
- What do you want your primary audience to do as a result of your communication with them? And keep in mind that this objective should be their own action and not done for them.

Identify the Target Audience – Primary or Secondary

As soon as you begin to get more specific about the problem or issue you are addressing, you'll begin thinking about the receiver of the message. There are two types of audiences to be concerned with: *primary* and *secondary*. Your primary audience is those people who you want to perform the ideal behavior. The secondary audience is any group of people who influence primary audience. Think about the example above—increasing blood lead screening. For screening, your primary audience is typically parents of children under the age of 6. However, you may decide to aim your message at health care providers who are the secondary audience, because they are sought out by parents for advice about the health of their children.

Once you've identified the audience intended to receive your message, you need to learn as much as you can about them. It will be helpful to know about their characteristics, their likes, dislikes, and motivations. It is important to understand the supports and barriers that exist in their lives.

Focus groups are often used to identify these very issues before developing any communications intended for the target group.

At the end of this chapter you will find specific considerations, strategies and tools for interacting with a variety of audiences: building trade professionals (including contractors, realtors, property owners, hardware store sales staff), health care professionals, parents, and WIC Project staff.

Identify the Principle Message to Convey

Once the target audience has been identified, you can begin developing the message you want to convey. The communication should focus on persuading the target to do something--the more action-oriented, the better. People respond better given some action to perform. Consider both the benefits to the target if they take action and what their perception will be if they do what you want them to do. Sometimes we are tempted to promise incredible outcomes if people change their behavior. Instead, the benefits should be focused on the individual and match the effort expended in the behavior change. In other words, if a do-it-yourselfer follows lead-safe work practices during remodeling, direct benefits might include a "lead-safe" house, no exposure to environmental contaminants to the worker or present occupants, and meeting standards for a "lead-safe" registry certificate. Other tangible outcomes that are possible can be included, such as that home remodeler, by using lead-safe work practices, may prevent future residents, especially children, from lead poisoning—a benefit to the larger community. But, don't go so far as to say that the value of their home will increase as a result. Remember--credibility is critical in the realm of public health.

The final step that must be considered in developing the message is how that target should be reached to achieve the greatest persuasive effect, that is, what medium will be most effective. This point often takes you back to the information you gathered when considering your audience. For example, in an outreach effort developed for a Latino community in New York, they found for parents and grandparents who care for young children that a very accessible medium is television, specifically during soap opera programs. The messages were developed as public service announcements and aired during times when those programs were being aired. Follow-up evaluation indicated that a significant portion of their target audience had seen their message. When you are considering medium, consider their habits--another audience may be more influenced by what they hear on the radio or by billboards because they spend their time commuting by car.

Plan to Evaluate

Evaluation should be considered whenever you plan to communicate with the public and even more importantly, when you are targeting a specific group with your message. Discuss evaluation as you plan your strategy and you will find it a helpful tool. If you wait until the end, you may find out that you have wasted your time.

There are three things to bear in mind when planning your evaluation: accountability, strategic planning and common sense. Each has a separate consideration and the activity you plan should reflect thought spent on each.

Accountability - Is the chosen strategy/activity going to answer the questions you're asking? Choose an appropriate measure for your activity. If your goal or objective is to see behavioral change, don't use a pre-/post-test as that will only tell you about knowledge change. To assess behavioral change, a pre/post observation of behavior is more appropriate. Two behavior change examples are: (1) automatic use of duct tape and 4 mil plastic floor coverings during renovation or (2) dust wipe samples collected and analyzed that meet clearance standards.

Strategic Planning - Is the education activity going to get you where you want to go? This point seems more obvious, but it's important to look beyond the activity to your longer-range objective. For example, if you want to affect behavior change in property owners with respect to the maintenance of their properties, consider what steps will likely lead to that behavior change. Maybe education of lead-safe maintenance practices will not be sufficient to make them change their attitudes and practices. Consider developing and adopting a local ordinance with enforcement consequences as part of the process to have true change happen.

Common Sense - Why do it if it isn't having an impact? Your resources--time, money and energy--are not limitless. As the old adage says, "Use your resources wisely." Spend your time only on those activities that will really accomplish something, get you closer to your ultimate goal. For example, health fairs may be good public relations, but only if it is part of a larger plan. The impact on participants is limited because you have a very brief time to interact and you compete with so many other programs at the event. Considering this at the outset will save you wasted time and energy on something that is not getting you closer to your objective.

Types of Evaluation

Any education activity or program should have some type of evaluation; many use more than one—to answer different questions or needs. There are three different types of evaluation: formative, process and summative. Each plays a different role, comes into play at different times and has different costs.

Formative evaluation is done during the preparation phase of the program. This type of evaluation is explorative qualitative work. Examples of formative evaluations are: focus groups, in-depth interviews, pre-testing,

setting baselines and segmenting audiences. Formative evaluation can be very costly. If a large amount of money is going to be spent in the communication or education activities, formative evaluation is worthwhile.

Process evaluation measures how the program is working. It typically takes place after some activity has occurred, maybe midway through your project, and determines if the activities are going as planned--whether or not the program is achieving what it intended. Examples of process evaluation are the number of brochures mailed, estimates of how often the message was seen, heard, etc., or if the survey respondents are giving you the feedback you need. Process evaluation is important to do to determine if any adjustments need to be made before proceeding. However, process evaluation stops short of measuring impact.

Summative evaluation proves a program has really done something—it measures outcomes and impacts. An outcome is a direct result of the program, for example, whether the audience understood the message you were trying to convey. The impact is less direct, but more critical as it assesses what changed as a result of the activity. Summative evaluation addresses accountability—what you set out to do has actually been accomplished.

Developing an Education Strategy

Compare the “doers” with “non-doers”

Look at those who already perform the behavior that you want your target audience to do. What is it that makes this possible? Does an incentive provide motivation? Will a penalty be a disincentive? Decide how you can use this incentive or penalty to elicit the same behavior with others in the same group or another group altogether. Use a peer group to help address the problem. Often focus groups can tell you what has motivated them to change their behavior.

Identify the barriers to change

Often barriers are the most difficult and least understood part of the process. It requires that you think and act from the perspective of the target audience. Again a focus group can help identify barriers that keep them from changing their behavior. It may be access to the knowledge, training or tools required to perform the desired activities. Once you have addressed the obstacle keeping someone from altering their behavior, you will be better equipped to effect change.

Develop education/training to address barriers

Sometimes addressing barriers can be as simple as increasing awareness of the serious consequences of their current behavior. Other times it may be a complex issue that is prohibitive, such as requiring a change to the entire system, requiring excessive time and effort. Address those barriers that you are able to and plan for an expanded effort as needed. One more

time, a focus group can help you understand what is not working and help with revisions to achieve success.

Pilot test your tools

There are different ways to test the tools you have developed. You can use a focus group and have them review your tools. Be sure to begin with a brief discussion about the purpose of the tool or strategy, but do not go into detail. You will not have that same opportunity with the general public. If you don't have time to assemble a focus group, conduct a process evaluation soon after implementation with those who have used the tool to see if it is having the desired effect.

Fine tune from recommendations

Use the feedback from your focus group or a mid-project process evaluation to make the necessary changes. And let your audience know that revisions have been based on audience feedback. Individuals often have a healthier respect for something if they know it has been developed with the input from those in a similar situation.

Evaluate to assess effectiveness

Remember to evaluate the impact of your tool or strategy.

Common Education & Evaluation Strategies

Sample Education Strategies

Commitment to promote behavior

Adopt an MOU (memorandum of understanding) between two parties. For example, the Tobacco Coalition, "Just Say NO!", and Lead-Free/Lead-Safe Registry programs all rely on a tacit agreement or promise to change behavior or practices.

Prompts to promote behavior

Much of the printed, audio and visual media produced by profit and non-profit organizations is developed for this very purpose, to remind people to buy their product, follow their lead, "do the right thing." Some examples of prompts are: stickers, door hangers, posters, "shelf-talkers" in building supply stores, billboards, public service announcements (PSAs).

Norms to promote behavior

Our society prides itself on consisting of "free-thinking individuals", but like it or not, we are influenced by what our families, neighbors, peers, colleagues, or authority figures believe or do. And very often that is a good thing because we do have to live together. So, take advantage of the influence of normative groups by getting endorsements from an organization like the American Medical Association (AMA) for promoting blood lead screening or a local Apartment Owners Association for promoting lead-safe housing. Another example of a normative strategy used in communities is placing a yard-sign indicating the home has been

made “lead-safe” or is “a child-healthy environment” in an at-risk neighborhood. Other residents or property owners want the same protection or status for their home.

Remove barriers to behavior

As mentioned before, it may be a lack of know-how that is keeping someone from changing the way they do things. So, for example, provide lead-safe work practice classes for do-it-yourselfers.

Common Evaluation Strategies

Measure of attendance:

Sign-up sheets, participant lists, audience counts, product counts, contact lists, catalogue of audience demographics

Measure of participant reactions:

Self-report/instructor, evaluation forms, program audit, exit interview, instructor logs, correspondence files, news clipping files

Measure of knowledge, attitudes, skills, awareness:

Peer review of materials, pre/post-test, certification exam, self-reflective writing, portfolio review, instructor logs, student journal, group self-assessment, polling, focus groups, informal consultation, skills demonstration, exit interview

Measure of behavior change:

Pledge, peer or participant rated exercise, incentive award, informal follow-up, polling, focus groups, direct observation, photo documentation, measuring indicators

Audience-Specific Information

We increase the capacity to fight lead poisoning by building partnerships with other agencies, organizations and businesses that serve those we are trying to protect. Included in this section are audience-specific considerations and tools/materials that have been developed for educational purposes.

Building Trade Professionals

Primary prevention of lead poisoning requires having partnerships with those who work in or interact with those in the housing industry: contractors, building inspectors, building permit staff, hardware or other building supply store staff, housing and weatherization agency staff, property owners and realtors. By raising their awareness about the significant effect lead can have on young children and demonstrating the simple steps that can be taken in their everyday work, we can gain their cooperation.

The following contains information on audiences or tools that have been developed to assist in your efforts with these populations.

For Working With a CDBG Agency...

70% of CDBG funds must be used for activities that benefit low- and moderate-income persons. All activities must meet one of the following national objectives for the program: benefit low- and moderate-income persons, prevention or elimination of slums or blight, community development needs having a particular urgency because existing conditions pose a serious and immediate threat to the health or welfare of the community. For more information on what these funds are intended to go to:

<http://www.hud.gov/offices/cpd/communitydevelopment/programs/cdbq.cfm>

For Hardware or Building Supply Store Sales Staff...

Working with Hardware Store Staff to Prevent Lead Poisoning – A comprehensive kit including planning guide, sample agendas/press releases, *Lead Poisoning Prevention 101* powerpoint presentation, and other tools. (For your copy of the kit, contact Reghan Walsh, walshro@dhfs.state.wi.us, 608/261-9432.)

Disclosure and PRE-Renovation Rules

Rule Fact Sheet

<http://www.hud.gov/offices/lead/1018/fs-discl.pdf> (English)

Protect Your Family from Lead in Your Home (booklet to distribute according to Rule)

<http://www.hud.gov/offices/lead/outreach/leapame.pdf> (English)

<http://www.hud.gov/offices/lead/outreach/leadpdfs.pdf> (Spanish)

For Rental Property Owners...

Federal law requires that individuals receive certain information before renting or leasing pre-1978 housing:

- Residential Lead-Based Paint Disclosure Program
- LANDLORDS have to disclose known information on lead-based paint and lead-based paint hazards before leases take effect. Leases must include a disclosure form about lead-based paint.

Sample Disclosure Form for Rental Property

http://www.hud.gov/offices/lead/1018/lesr_eng.pdf (English)

<http://www.hud.gov/offices/lead/1018/spanless.pdf> (Spanish)

Look Out for Lead for Rental Property Owners education pamphlet (English)

(contact the WCLPPP for copies, 608/266-5817)

For Realtors/Owners Selling a Property...

Federal law requires that individuals receive certain information before buying pre-1978 housing:

- Residential Lead-Based Paint Disclosure Program
- SELLERS have to disclose known information on lead-based paint and lead-based paint hazards before selling a house. Sales contracts

must include a disclosure form about lead-based paint. Buyers have up to 10 days to check for lead hazards.

Sample Disclosure Form for Housing Sales

http://www.hud.gov/offices/lead/1018/selr_eng.pdf (English)

<http://www.hud.gov/offices/lead/1018/spansell.pdf> (Spanish)

For Contractors/ Weekend Do-It-Yourselfer ...

Federal law requires that contractors provide lead information to residents before renovating pre-1978 housing as part of the Pre-Renovation Education Program (PRE) and distribute a pamphlet titled "Protect Your Family from Lead in Your Home", before starting work. For more information:

The Lead-Based Paint Pre-Renovation Education Rule

<http://www.epa.gov/lead/interiorfinal2.pdf> (English)

Reducing Lead Hazards When Remodeling Your Home

<http://www.epa.gov/lead/rrpamph.pdf> (English)

http://www.epa.gov/lead/span_web_secure.pdf (Spanish)

Lead Paint Safety: A Field Guide for Painting, Home Maintenance and Renovation Work

<http://www.hud.gov/offices/lead/training/LBPguide.pdf> (English)

<http://www.hud.gov/offices/lead/training/LeadGuide-Sp-6-5.pdf> (Spanish)

Look Out for Lead for Contractors education pamphlet (English)
(contact the WCLPPP for copies, 608/266-5817)

For Health Care Professionals

We know from physician/health care provider surveys that a physician is allotted 15 minutes to complete a well-child exam of a young child in the clinic setting and must conduct more than 15 health assessments. Even though on those assessments is the child's risk for lead poisoning, if a child has a more urgent or visible malady, assessment for risk of lead poisoning may just drop off the list due to time constraints. Until physicians and other health professionals comprehend the seriousness of childhood lead poisoning, we will continue to see low compliance with screening guidelines.

We must work within the health care system to educate influential staff (clinic managers, policy makers, pediatricians, fiscal decision-makers) about the far-reaching consequences of childhood lead poisoning and the subsequent burden on the health care system.

Surveys indicated that physicians respond more favorably to research, so presenting early brain development research can be effective. The Wisconsin Council on Children and Families has developed, *Brainwatch*, a set of fact sheets illustrating and describing the critical elements of development and where lead can interfere. The fact sheets can be ordered from their webpage:

<http://www.wccf.org/publications/index.html#brain>

Another type of information that can be effective with physicians is a GIS map which overlays incidence of testing and poisoning with age of housing. These maps illustrate the correlation between old housing and increased risk, driving home the point that this is an environmentally-based disease and screening is crucial. Contact WCLPPP for a map of your area.

Also, the medical profession has been characterized as being very competitive, therefore peer comparison of performance in blood lead screening was shown to be an effective tool in increasing compliance.

Contact WCLPPP for these other simple, time-effective tools for the clinic setting:

4 Easy Questions About Screening for Lead (English/Spanish)

What Every Family Needs to Know (7 facts; English)

A Wisconsin Physician's Guide to Blood Lead Screening & Treatment of Lead Poisoning in Children

For Parents

Parents of young children are most often in the primary position to supervise and observe a child's activities. (The term "parents" as used in this chapter includes both legal guardians and custodial guardians, and all other caregivers of young children.) This also makes them the primary resource for preventing exposure, and assuring timely testing and early diagnosis of the disease if their children are exposed.

Addressing lead poisoning, both causes and effects, is as important a primary prevention tool as discussing car seat safety and bike helmets. A few simple questions about the age of housing where the child lives or spends time can lead directly to information about the sources of lead exposure. Then providing information about the simple steps a parent can take to decrease or prevent lead poisoning, and the importance of blood lead screening tests at a young age can make a difference in a child's vulnerability to lead poisoning.

Parent Information pamphlets...

Look Out For Lead for Parents

<http://www.dhfs.state.wi.us/eh/Lead/LeadPDF/BrEng.pdf> (English)

<http://www.dhfs.state.wi.us/eh/Lead/LeadPDF/BrSpan.pdf> (Spanish)

For WIC Project Staff

A successful partner in testing children for lead poisoning in Wisconsin has been the Women, Infants and Children (WIC) Nutrition Program. WIC project staff, champions of nutrition, understand the role that nutrition can play in preventing and treating lead poisoning. As part of their regular program, they screen children's iron levels through the collection of blood samples. Screening for blood lead was a straight-forward addition to their testing protocol. Materials were developed to enhance that partnership.

Look Out for Lead with Healthy Eating poster developed with input from WIC staff that highlights the connection between nutrition and childhood lead poisoning prevention. It contains simple, easy-to-read messages on the effects of lead poisoning and the role of nutrition in prevention and treatment. Things such as: the types of foods that can help prevent young children from absorbing lead, a reminder to wash hands before eating and the importance of having a child's blood tested for lead. A reduced-size (8.5 X 11) version is included in this chapter. Full-size posters can be obtained by contacting us, 608/266-5817.

EPA brochure: *Fight Lead Poisoning with a Healthy Diet*. This pamphlet is attractive and includes recipes for healthy snacks. Non-profit agencies can order up to 100 copies at a time by calling the National Lead Information Center, 1-800-424-5323. A larger size version is available at <http://www.epa.gov/lead/nutrition.pdf> (English).

Eating Right: Preventing Childhood Lead Poisoning nutrition series card (Feeding Your Child – 13). An easy reference card that a parent can take home. Contains same messages as the poster. Order these by contacting April Spores with the WIC Program, (608) 261-6381.

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Other resources

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